

Preface

ACCORDING to a widespread stereotype, history is of two kinds—“mainstream” Western history and assorted chauvinistic accounts. From an Indian perspective, the choice is wider: for it is easier to see that recent chauvinistic Indian history is profoundly imitative of chauvinistic Western history! This parallelism is readily explained since both attempts to manipulate history arise from the same cause: the use of religion as an instrument to attain and retain state power. However, historians from across the political spectrum have unfortunately failed to notice this parallelism earlier, and the current account of the history of science continues to be regarded as broadly representative of the truth.

The received account, of course, makes science entirely a domestic Western affair, starting from the “Greeks” and developing during the European renaissance. Therefore, it is hardly possible today to write a meaningful history of Indian science without contending with the received account and the stereotypes which reinforce it by suggesting derogatory labels for dissenting accounts.

A further obstacle is the way the philosophy of science reinforces the received history. As I have earlier remarked, science means never having to say you are sure: certitudes of any sort are the hallmark of religious belief. However, science is often demarcated using the criterion of falsifiability which supposes (as does most Western philosophy) that deduction is certain while induction is not. This belief in the certainty of deduction is the anchor also of the present-day formalist philosophy of mathematics which equates mathematics with deductive proof—hoping to make mathematics the currency of certainty. This certitude, one naturally suspects, is interlaced with theology.

To bring out the theological underpinnings of present-day formalist mathematics—or the theological origins of the art of theorem-proving—it is necessary, first, to trace the historical development of formalism from Platonism to Neoplatonism via Islamic rational theology to Christian rational theology to the present-day. Secondly, the theological moorings of formalist beliefs about logic and number come into sharper focus when we confront formalism with Buddhist and Jain logic on the one hand, and the *śūnyavāda* philosophy of non-representables and computer technology on the other. Finally, it is helpful to demonstrate